DOCUMENT RESUME

ED 053 295 VT 013 116

AUTHOR	Sumerell, Craven H.
TITLE	A Study of the Educational and Manpower Needs of the Catawba Valley Technical Institute Impact Area.
INSTITUTION	Catawba Valley Technical Inst., N.C.
SPONS AGENCY	North Carolina Research Coordinating Unit in Occupational Education, Raleigh.
NOTE	75p.; Research Series in Occupational Education 18
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	Building Plans, Community Attitudes, *Community Colleges, Community Surveys, Comparative Analysis, *Educational Needs, Employer Attitudes, *Manpower Needs, Program Development, *Program Planning, Sampling, *Technical Institutes, Vocational Education

ABSTRACT

The purpose of this study was to make a survey of the educational needs of the community served by the Catawba Valley Technical Institute (CVTI), the results of which would serve as a basis for the projection, planning, and revision of the CVTI instructional programs and the planning of physical facilities. In this cooperative venture, the data were collected by the CVTI, and assistance in the design of the study and preparation of the final report was provided by the Research Coordinating Unit. The procedure used was a stratified random sample of the industrial, business, and service complex in the area. Also, high school students and their parents were surveyed, and a public opinion survey was made by a systematic sampling process. Specific conclusions were that there is a trend toward a higher level of education in the impact area, there is a definite need to intensify the public relations program, there is a need for the addition of a 2-year college program parallel to the present program, and there is a need for further study in the area of occupational upgrading. (GEB)

ED053295

A STUDY OF THE EDUCATIONAL AND MANPOWER NEEDS OF THE CATAWBA VALLEY TECHNICAL INSTITUTE IMPACT AREA

Conducted by
THE CATAWBA VALLEY TECHNICAL INSTITUTE
Under the Direction
of
CRAVEN H. SUMERELL

RESEARCH SERIES IN OCCUPATIONAL EDUCATION

NORTH CAROLINA RESEARCH COORDINATING UNIT IN OCCUPATIONAL EDUCATION

VT013116

SCHOOL OF EDUCATION
NORTH CAROLINA STATE UNIVERSITY AT RALEIGH
RALEIGH, NORTH CAROLINA

ED053295

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

A STUDY OF THE EDUCATIONAL AND MANPOWER NEEDS OF THE CATAWBA VALLEY TECHNICAL INSTITUTE IMPACT AREA

Conducted By

THE CATAWBA VALLEY TECHNICAL INSTITUTE

Under the Direction

of

CRAVEN H. SUMERELL

RESEARCH SERIES IN OCCUPATIONAL EDUCATION

NORTH CAROLINA RESEARCH COORDINATING UNIT IN OCCUPATIONAL EDUCATION

Research Series in Occupational Education - No. 18
A report of research conducted by The Catawba Valley Technical Institute under the direction of Craven H. Sumerell. Publication and dissemination of research findings is in cooperation with the North Carolina Research Coordinating Unit in Occupational Education.

FOREWORD

The North Carolina Research Coordinating Unit in Occupational Education is pleased to have the opportunity of disseminating this report of a recent study conducted by The Catawba Valley Technical Institute under the direction of Craven H. Sumerell.

This publication and others to follow are a result of the partial fulfillment of the commitment of the North Carolina Research Coordinating Unit to:

(a) Stimulate research in occupational education.

(b) Identify problems for research.

(c) Develop a system by which national, state, and local data may be organized and made available.

(d) Maintain communication between people who are working in occupational education and research workers.

(e) Assist in conducting training programs on activities involved in the research-action continuum.

(f) Provide consultant services in state, local, and area research developmental activities.

Joe R. Clary
Director

PREFACE

The community college system in North Carolina had its beginning with the implementation of a movement toward expansion of post-high school vocational education programs in 1957. This movement was reflected in a recommendation of the State Board of Education to the General Assembly and it had the blessings of Governor Luther Hodges. The original proposal called for seven industrial education centers with eleven additional ones to be added during the 1959 biennium. By 1960 the State Board of Education, under Dr. Dallas Herring, felt the need for intensively studying the developing dual system of industrial-technical education centers and public junior colleges. Dr. Herring was instrumental in getting Governor Terry Sanford to call for a statewide study of education beyond the high school. This study was made by the Carlyle Commission in 1962. One of the recommendations was that the State combine the industrial-technical education centers and the public junior colleges into a comprehensive community college system under the direction of the State Board of Education. In 1963 the Community College Act became law.

The founding fathers of the Catawba Valley Technical Institute saw the need for this new system of education that would provide occupational training in business and in industry for the vast majority of its citizenry who did not plan to attend a college. They were concerned with high school and post-high school men and women who entered the labor market with virtually no saleable skills.

Interested industrialists, businessmen, county government officials and school officials, in seeing the need, were determined to see this new system of education become a reality in Catawba County. Consequently, with the united efforts of the citizens of Catawba County, a plan was submitted to the State Board and sufficient financial resources were provided to purchase the original

fifteen-acre site and construct the original 40,000 square-foot facility to initiate this new training.

In the early stages when CVTI was known as the Catawba County Industrial Education Center, the institution established programs in vocational and technical occupation training for both high school and post-high school youths and adults. The charter class began the fall of 1960, with 77 students in 6 programs.

One of the major problems in the early stages of the Institute was informing the public of the type of program and the purpose of the Institute. Many people in the Catawba County and surrounding areas had extreme doubts about this new form of education; but gradually as the people began seeing the concrete results and benefits, the public in general accepted their new form of education and responded to this concept with increasing enthusiasm.

With the same response that was being realized by the original industrial education centers and with the acceptance by the county of the increasing need for more diversified programs in occupational and technical education, the industrial education center almost immediately became a success.

In 1963, the Catawba County Industrial Education Center was elevated to technical institute status and became known as the Catawba Valley Technical Institute, offering one-year vocational training, two-year technical training, business and industrial upgrading and adult education with a wide range of services for the general public.

The Catawba Valley impact area is composed of Catawba, Caldwell, Burke, Alexander, Lincoln, and Iredell Counties. This area is situated in the Western Piedmont region of North Carolina within forty miles of the Blue Ridge Mountains. In 1968 the population was estimated to be 316,100 people. The impact area counties served by Catawba Valley Technical Institute range in per capita income by county from the 4th highest in the state to 30th.

To the west of the impact area, the mountainous region of North Carolina is encountered and to the east the heavily populated central area of North Carolina is found.

Within an hour's drive south, the largest population and industrial center in the two Carolinas, Charlotte, may be reached. A one and one-half hour drive eastward will take you to Winston-Salem, Greensboro, and High Point, the industrial complex known as the Piedmont Triangle, where are found both the world's tobacco center and the world's largest furniture market. With a one and one-half hour's drive westward, you will encounter the largest population and industrial center in Western North Carolina, Asheville. Catawba Valley Technical Institute is located in the fastest growing area between Richmond and Atlanta. The area served by CVTI is situated in the heart of the Western Urban Complex which produces 52% of all of the furniture made in the United States.

TABLE OF CONTENTS

PAGE

PREFACE i

TABLE OF CONTENTS iv

LIST OF TABLES v

CHAPTER I

INTRODUCTION 1

Statement of the Problem 1

Objectives of the Study 1

Procedure 2

Data Analysis 4

Limitations 4

CHAPTER II

PRESENTATION AND DISCUSSION OF FINDINGS 6

A Survey of Students 6

Survey of Parents 19

Perception of Community Citizens Toward CVTI 27

Employment and Training Needs as Perceived by Industry 30

Supplementary Educational Data 42

CHAPTER III

SUMMARY AND CONCLUSIONS 57

APPENDIX 60

LIST OF TABLES

TABLE		PAGE
1	Distribution by County of the Survey Group of Students	6
2	Distribution According to Age of Students Surveyed	7
3	Distribution of Students Surveyed by Grade Level	8
4	Students' Replies Concerning Average Grades and Major Course Emphasis of Students in the Catawba Valley Area	9
5	Educational Plans of High School Students in the Catawba Valley Impact Area	10
6	Interest in Attending a 2-Year College Parallel Program at Catawba Valley Technical Institute	11
7	Expressed Work and Educational Plans of Students and Parents' Work and Educational Plans for Children After High School as Reported by the Students in the Catawba Valley Impact Area	12
8	Length of Training Programs Desired by Students in the Catawba Valley Area	13
9	Student Rating of Future Job Characteristics by Percentage Distributions	14
10	Student Rating of CVTI and Percentage of Students That Would Like to Pursue Education at CVTI	15
11	Frequency Distribution of Families Showing the Number of Children Per Family in Elementary or High School	20
12	Comparison of Educational Level of the Parents or Guardians Completing the Questionnaire and Their Educational Aspirations for Their Children	21
13	Ratings of Catawba Valley Technical Institute as Compared to Ratings Given Other Criterion Educational Institutions in the Area	22
14	Ratings of Educational Programs at Catawba Valley Technical Institute.	23
15	Percentages of Parents or Guardians Who Have Visited CVTI or Have Taken Courses at CVTI	24
16	Parent Recommendations Toward Expanding Programs Offered at Catawba Valley Technical Institute	25
17	A Survey of Public Opinion Toward Catawba Valley Technical Institute	29
18	Businesses and Industries Responding to the Catawba Valley Impact Area Survey	31

List of Tables (Continued)

TABLE		PAGE
19	Businesses and Industries Surveyed in Catawba Valley Impact Area Calssified by County.	32
20	Percentage Replacement Needs for Managerial, Supervisory, Technical, Clerical, Skilled and Unskilled Employees	33
21	Percent Increase in Employment Needs in the Catawba Valley Impact Area by 1971 and 1974	34
22	Manpower Shortages by Job Level	35
23	Upgrading Courses Needed for Personnel by Job Level	36
24	One-Year Trade Programs Now Being Offered at CVTI Which the Industries Surveyed Feel Will be Needed to Train Personnel for Their Firms	37
25	Additional One-Year Trade Programs Which the Industries Feel Should Be Added at CVTI	38
26	Two-Year Technical Programs Now Being Offered at CVTI Which Industries Feel Will Be Needed to Train Personnel for Their Firms	39
27	Should Catawba Valley Technical Institute Add a Two-Year College Program to its Existing Programs?	40
28	Percent of Change in Enrollment, 1967-68 in the Schools of the Catawba Valley Impact Area	43
29	Percent Change in Enrollment by County, 1957-58 to 1967-68	44
30	Percent of 1959-60 Fifth Grade Graduating in 1967	45
31	Percent High School Graduates Entering College	46
32	Percent High School Graduates Entering Trade, Business, Other Training.	47
33	Per Pupil Expenditure, Federal Funds, By County	48
34	Per Pupil Expenditure, State Funds, By County	49
35	Per Pupil Expenditure, Local Funds, By County	50
36	Per Pupil Expenditure, All Sources, By County	51
37	Per Capita Income By County	52
38	Equalized Valuation Per Pupil Enrolled, 1966-67	53
39	Local Property Taxes for Schools as Percentage of Property Taxes for All Purposes	54

List of Tables (Continued)

TABLE		PAGE
40	Projected Number of N. C. Public High School Graduates in N. C. Counties 1962-1970	55
41	Projected College Age Population 1960, 1965, 1970	56

CHAPTER I

INTRODUCTION

In the past several years the impact area served by Catawba Valley Technical Institute has experienced rapid growth, both from an industrial and a population standpoint. This growth may be seen in the diversification of industry and the expansion of the industries which have existed in the area for some time. The population has experienced a parallel growth with the industry and the expansion of both industry and population is reflected in the growth of Catawba Valley Technical Institute. This growth is seen in the rapid development of the Institute from a 77-person student body when the school opened in 1960 to the present 4,000 persons being served each quarter of the year at the Institute. At the same time there has been an increase in the number of programs to the point that now CVTI has seventeen two-year associate degree programs and seven one-year diploma programs which are being offered.

Statement of the Problem

The purpose of this study was to make a comprehensive survey of the educational needs of the community served by CVTI. This study will serve as a basis for the projection, planning, and revision of the CVTI instructional programs, as well as for the future planning of the physical plant facilities.

Objectives of the Study

The objectives of this study were to: (1) Determine the educational level and educational trends in the area; (2) Determine the educational and occupational aspirations of public school students from grades 8 - 12 and to obtain the same information from the parents of these students; (3) Determine employment trends of the agricultural, business, and industrial community in the area; (4) Determine present and prospective training needs of the business and

industrial community which might be met wholly or partially by Catawba Valley Technical Institute; (5) Determine the need for an interest in the development of college parallel curricula and the movement of CVTI toward becoming a comprehensive community college; (6) Examine the CVTI instructional programs currently offered and determine the need for additional programs or changes in the existing programs; (7) Determine facilities, equipment, staff and other resources needed for adequately meeting the educational needs documented in this study.

Procedure

Initial planning for the study was completed after consultation between staff members of CVTI and the Research Coordinating Unit in Occupational Education. The objectives for the study were set and responsibilities for various aspects of the study delegated to each member of the planning staff. Approximately two months elapsed from the initial planning session to the final development of instruments to collect data.

Sampling Procedure

The manpower needs were determined by surveying a sample of the industrial, business, and service complex in the Catawba Valley Area. A disproportionate sample was randomly selected from a list of the manufacturing firms developed by the North Carolina Department of Labor. The firms were stratified according to type and size before using the sampling techniques. The survey instrument was administered by interviewing appropriate personnel in firms with 250 employees or more. A large

number of firms were of medium and small size. These firms were surveyed through a mailed questionnaire technique. The sampling plan insured completed responses from the firms which were instrumental in the development and expansion of the Institute and included a sampling of smaller firms in order to ascertain if their manpower needs are being adequately met by current programs and to determine the manpower needed for their expansion.

As in any area like Catawba Valley, the nonmanufacturing and service firms constitute a sizable clientele to be served by CVTI. After checking with various agencies, it was determined that a suitable listing of these type firms was nonexistent. As a last resort, the Yellow Pages in the telephone book were modified and used as a listing of non-manufacturing and service firms. The modification involved deleting manufacturing firms and firms which were listed under a heading of less than 5 listings. After modifying the Yellow Pages listings, each heading was systematically sampled according to size. A total of 525 firms were selected for the survey.

The high school students and their parents were surveyed in order to determine their feelings toward the vocational, technical, up-grading, and general education programs offered at CVTI. All the public high school seniors in the six county Impact Area of CVTI were included in the student survey. In addition, one section, randomly selected, from each grade, 8th through 11th, was also sampled. A total of 2,835 students was surveyed.

Each of the students in the sample was requested to have a "parents form" completed by their parents and return it to school. There were 2,328 parents' forms returned by the students in the sample.

A Public Opinion Survey was made by systematically sampling from the list of people with telephones in the Catawba Valley Impact Area. A total of 488 people was selected and surveyed by a questionnaire.

Other demographic and educational status data were compiled from census data for the area and by analyzing public school data compiled by the State Department of Public Instruction. These data provided a general assessment of the CVTI Impact Area in relation to the State average.

Data Analysis

Categories for analysis of the data were the five major areas of the study: (1) Students (2) Parents (3) Public (4) Industry (5) Secondary Data.

All survey forms were checked for accuracy and consistency of coding for recording on IBM cards. The cards were key punched and verified by the data processing department at CVTI. The IBM cards were taken to the Research Coordinating Unit in Raleigh for organizing, coding and programming. The 360/40 at North Carolina State University and the 360/75 at the Research Triangle were used in compiling the data for the study.

These data are exhibited in this report of the Study in the form of 41 tables, appearing under the appropriate categories. The data in these tables are reported as frequency distributions and percentages.

Limitations

It is acknowledged that certain conditions limit the interpretations and conclusions drawn from the data. Several sources were sampled in the industry survey with each having a different rate of return.

In merging the survey returns from each sample. the larger industries had more impact on the results than the smaller industries. In addition, a low rate of response was especially troublesome for the public opinion survey.

CHAPTER II

PRESENTATION AND DISCUSSION OF FINDINGS

A Survey of Students

Residence of the Survey Group

Of the 2835 students included in the survey, 57.43% were living in Catawba County. It is of interest that the percent of students from each county included in the survey, as shown in Table 1 below, closely corresponds to the percent of curriculum students for each county. Of the total number of curriculum students enrolled at CVTI during 1968-69*, 53.0% was from Catawba County, 7.3% from Alexander County, 9.0% from Burke County, 3.8% from Caldwell County, 14.1% from Iredell County, and 5.3% from Lincoln County. Since CVTI is a commuters' institution, this parallel of enrollment to survey findings is not surprising.

Table 1. Distribution by County of the Survey Group of Students. (n=2835)

County	Number of Students	Percent of Total Group
Alexander	224	7.90
Burke	194	6.84
Caldwell	174	6.14
Catawba	1,628	57.43
Iredell	252	8.89
Lincoln	290	10.23
Not Indicated	73	2.57
Totals	2,835	100.00

*Source: Annual Report of Students Services, CVTI 1968-69 (Larry Isenhour, Registrar).

Age and Grade Level of Students Surveyed

It may be seen in Table 2 that the largest percent of the students surveyed was in the seventeen-year old group. In Table 3 the twlefth grade has the leading percentage.

This emphasis placed on the twelfth grade and seventeen-year-old age group was designed to aid the Institute in planning for the immediate future.

The younger age and grade groupings were included in the survey in order to provide the CVTI administration with some evidence of student inclinations from these groups for aiding in over-all planning for five years.

TABLE 2. Distribution According to Age of Students Surveyed. (n = 2835)

Age in Years	Number of Students	Percent of Total Group
13	342	12.06
14	405	14.29
15	363	12.80
16	476	16.79
17	1,002	35.34
Other Ages (12, 18-21)	247	8.72
Totals	2,835	100.0

TABLE 3. Distribution of Students Surveyed by Grade Level. (n = 2835)

Grade Level	Number of Students	Percent of Total Group
8th	421	14.85
9th	412	14.53
10th	383	13.51
11th	454	16.01
12th	1,161	40.95
Not Indicated	4	.15
Totals	2,835	100.00

Occupational and Educational Plans of Students Surveyed.

Certain information from the survey forms was compiled in order to determine educational plans of the students, job plans of the students, interest of the students in a two-year college program at CVTI, desires of parents or guardians regarding future work and educational activities of the students, kinds of post secondary training programs desired by the students, characteristics of jobs desired by the students, student opinion of CVTI and programs desired by prospective students at CVTI.

Average Grades and Major Course Emphasis of Students in the Impact Area.

According to the student replies in Table 4, the highest percentage of the students indicated that they received close to a "B" average, with the second highest percentage being close to a "C" average. The third highest group claimed receiving close to an "A" average, with the smallest number being below a "C" average.

In their indications of major course emphasis, 40.99% of the students are in a college preparatory course in high school, while 23.35% are in technical or vocational training and 32.59% are taking general education courses.

TABLE 4. Students' Replies Concerning Average Grades and Major Course Emphasis of Students in the Catawba Valley Area. (n = 2835)

My Grades Have Been	Number of Students	Percent of Total Group
Close to an "A" average	460	16.58
Close to a "B" average	1,139	40.21
Close to a "C" average	1,061	37.43
Below a "C" average	142	5.01
Not Indicated	33	.77
Totals	2,835	100.00
Course Emphasis		
College Preparatory	1,162	40.99
Technical-Vocational	662	23.35
General Education	924	32.59
Not Indicated	87	3.07
Totals	2,835	100.00

In Table 5, 37.57% of the replies of the students indicated they wished to graduate from a four-year college or university. Of particular interest in the future planning for CVTI is the fact that 24.62% of the students said that they wished to graduate from a trade or technical institute. Another percentage figure which is of interest to CVTI is the 10.09% who indicated they wished to graduate from a business or nursing school.

Since 37.57% indicated that they wished to graduate from a four-year college or university, the total of these percent figures (72.28%) indicates that graduating from an institution of higher education is the prime educational goal in the impact area.

TABLE 5. Educational Plans of High School Students in the Catawba Valley Impact Area. (n = 2835)

	Number of Students	Percent of Total Group
Drop out before completing high school	12	.42
Graduate from high school only	468	16.51
Graduate from trade or technical school	698	24.62
Graduate from business or nursing school	286	10.09
Graduate from 4-year college or university	1,065	37.57
Go into military service	108	3.81
Other Plans	171	6.03
Not Indicated	27	.95
Totals	2,835	100.00

Student Interest in Attending a Two-Year College Parallel Program at CVTI

Table 6 indicates that 20.95% of the students replying would attend the first two years of college at CVTI if it were offered.

A very large part of the group, 40.60% is shown as not committed.

TABLE 6. Interest in Attending a 2-Year College Parallel Program at Catawba Valley Technical Institute. (n - 2835)

	Number of Students	Percent of Total Group
Not planning to go to college	403	14.22
Not sure	1,151	40.60
Yes, I would attend first 2 years of college at CVTI	594	20.95
No, I would not attend first 2 years of college at CVTI	672	23.70
Not Indicated	15	.53
Totals	2,835	100.00

Expressed Work and Educational Plans of Students and the Parents' Work and Educational Desires for their Children as Reported by the Students.

The majority of the students expressed a desire to complete high school, trade school or college before going to work full-time; while a large number indicated that they wished to work part-time and go to school part-time.

In Table 7 the majority of the students said that their parents wanted them to go to college. This was indicated by 53.79% of the students. Next in importance, 32.24% of the students said that their parents wished them to go to a trade school, technical institute, or business school. There appears to be a fairly close resemblance between the students' plans and the parents' plans for their children as reported by the students.

TABLE 7. Expressed Work and Educational Plans of Students and Parents' Work and Educational Plans for Children After High School as Reported by the Students in the Catawba Valley Impact Area. (n = 2835)

Students' Plans:	Number of Students	Percent of Total Group
Go to work full-time with no further schooling	294	10.37
Go to work part-time and go to school part-time	842	29.70
Complete high school, trade school, or college before going to work full-time	1,665	58.73
No plans indicated	34	1.20
	2,835	100.00
Parents' Wishes:		
Go to college	1,525	53.79
Go to a technical institute, business or trade school	914	32.24
Go to work without further schooling	123	4.34
My parents do not care what I do	221	7.80
Not indicated	52	1.83
	2,835	100.00

Length of Training Programs Desired by Students.

Table 8 shows that almost two-fifths of the students in the impact area expressed a desire for two or more years of training. Another large group was the "Up to Two-Year Training Period," in which 30.19% expressed a desire. Programs of "Up to Twelve Months" were desired by 22.75% of the students. Short courses of less than six months were desired by 6.31% of the students replying.

TABLE 8. Length of Training Programs Desired by Students in the Catawba Valley Area. (n = 2835)

Length of Training Program	Number of Students	Percent of Total Group
Less than 6 months	179	6.31
Up to 12 months	645	22.75
Up to 2 years	856	30.19
More than 2 years	1,098	38.73
Not indicated	57	2.02
	2,835	100.00

Student Ranking of Future Job Characteristics.

In Table 9 the most significant percentage that may be noted among the various categories is that "liking the work" was more important to the students than any other single characteristic. As may be expected, the second most important characteristic was the desire for "good working conditions." A "good salary" was rated third in importance by the students. Factors such as, "steady employment," "having responsibility," "opportunity for job advancement" and "regular work hours" also were rated high by the students.

TABLE 9. Student Rating of Future Job Characteristics by Percentage Distributions. (n = 2835)

	Very Important	Of Some Importance	Not Important	Do Not Know	Have Not Thought About It	No Response
Steady employment (no winter or summer lay-offs)	62.79	16.44	3.95	3.60	5.61	7.62
Liking the work (enjoy work)	84.76	5.93	0.49	0.88	0.42	7.51
A good salary	74.92	15.91	0.74	0.46	0.39	7.58
Regular work hours	48.25	33.02	5.43	2.82	2.68	7.80
Opportunity for job advancement	56.23	21.27	3.28	1.94	3.03	14.25
Having responsibility	56.61	27.76	2.36	1.98	3.17	8.11
Working with things rather than people	15.03	26.81	32.20	7.48	10.19	8.29
Good working conditions	77.64	11.89	1.02	0.78	0.63	8.04

Students' Rating of CVTI and Percentage of Those Wishing to Pursue Education at CVTI.

In Table 10, 81.2% of the students surveyed rated CVTI as either excellent or good. It is significant to note, however, that 11.39% replied that they did not know enough about CVTI to give an answer.

In responses to the question concerning the students wishing to pursue education at CVTI, 54.81% of the students indicated that they wished to pursue training in one of the 35 programs listed in the survey questionnaire. Of the total number of students replying, only 37.07% indicated that they did not wish to pursue education at CVTI.

TABLE 10. Student Rating of CVTI and Percentage of Students That Would Like to Pursue Education at CVTI. (n = 2835)

Rating of CVTI	Number of Students	Percent of Respondents Rating
Excellent	947	33.40
Good	1,355	47.31
Poor	16	.56
Don't Know	323	11.39
Never Heard of CVTI	84	2.96
No Response	110	3.88
	2,835	100.00

Desire to Attend CVTI	Number of Students	Percent of Students
Yes	1,554	54.82
No	1,051	37.07
No Response	230	8.11
	2,835	100.00

Implications of Information from Students' Survey Form

In the impact area served by CVTI there are 19,874 students in grades eight through twelve. The Five-Year Study surveyed 2,835 students for a 7.3 percentage of the total student population in the grades surveyed.

It should be noted that more than one-half of the students surveyed were from Catawba County and that 1,162 of the total number surveyed were in the twelfth grade. This reflects the emphasis which was placed on planning for the immediate future, without forgetting the long-range nature of the study. Another important facet of the study is that Catawba County supplies the majority of students at CVTI; and, therefore, the major emphasis of the survey was concentrated in Catawba County. To further explain the emphasis on the immediate future, 992 of the total number of students surveyed fell in the seventeen-year old age category, with a declining number of students being surveyed between ages twelve and sixteen.

The fact that 1,063 indicated on their survey forms that they wished to graduate from a four-year college or university reflects the trend in this area for higher education at the college level. Particularly significant in the future planning of CVTI is the fact that 608 of [redacted] students indicated a desire to graduate from trade or technical schools. A further 283 students pointed out from their replies that they wished to graduate from a business or nursing school. Since CVTI has a varied business curricula, it is possible that some of the 283 who wished to graduate from business or nursing school may decide to take advantage of the courses offered at CVTI in business or elect to study in the one-year Practical Nursing Curriculum which is also offered at CVTI.

Another area which should be of interest in the planning in the next five years at CVTI is pointed out in the student survey replies concerning the interest of the students in attending their first two years of college at CVTI if a

two-year college parallel program were added to the total program of the Institute. This consideration is supported by an affirmative reply from 20.98% of the students surveyed when asked if they would attend a two-year college parallel course if it were available. A further 40.59% replied that they were not sure if they would attend a two-year college parallel program.

The expressed work and educational plans of students in the impact area reflected the increasing emphasis and interest of the students on furthering their education in some way upon graduation from high school since 58.97% reported plans to complete high school, trade school, or college before going to work full-time. An interesting supplement concerning the work and educational plans of the students is shown by the fact that 29.98% of the students indicate a desire to work part-time and go to school part-time.

There was a close parallel between the percentage of students in college preparatory courses (40.99%) and the percentage that indicated their intentions to attend a four-year college or university (37.57%). However, in comparison to the number of students who did not plan to continue their education beyond the high school level, there was a relatively small per cent enrolled in technical-vocational programs. Approximately 23% of the students surveyed were in high school vocational-technical programs while approximately 51.2% indicated that they either intended to terminate their education after high school or attend a trade, technical, business, or nursing school after high school graduation. Those terminating their education (16.51%) probably need to be enrolled in high school vocational-technical programs in order to obtain a salable skill and those continuing in a technical area may need the background which can be afforded by a high school vocational-technical program.

While 81.20% of the students rated CVTI as either excellent or good, it is important to note that 11.39% of the students did not know whether CVTI

was excellent, good or poor, and 2.96% of the students indicated that they had never heard of CVTI.

In conclusion, 53.93% of the students reported that they would like to pursue their education at CVTI. This number is of importance not only in the planning for the immediate future but also for the planning of programs during the next five years at CVTI.

Survey of Parents

Preferences of Parents Toward Education for Their Children

The parents' survey form was designed to determine the educational aspirations of parents or guardians toward education for their children. Sections of the form investigated the number of children per family, the educational level of the person completing the form, their educational aspirations for their children, their general opinion toward CVTI and their opinions toward the future direction for the Institute.

Each parent or guardian completed the form as it applied toward a specific child in his family. Since the children who took the parents' questionnaire home were randomly selected, it is assumed that they represent a cross-section of the impact area in terms of family circumstances and the interests of the parents of the area. Therefore, the results from the parents' questionnaire may be regarded as indicative of the educational needs of all children in the Catawba Valley community.

The parents' questionnaire was completed by the father, mother, guardian, or other persons responsible for the education of the child. Of the 1,828 replies, 25.8% were completed by the father, 65.5% were completed by the mother, 8.9% were completed by a guardian, and 2.4% were completed by other persons.

Parents' survey forms were personally carried home by each student in the classes surveyed. The total number distributed was 2,835 and there were 1,828 replies. It should be explained that since many parents who received the forms had more than one child in school, some returned only one copy of the parents' form. The exact number of such instances was not determined.

Number of Children Per Family in Elementary or High School.

In Table 11, 57.99% of the parents surveyed had either one or two children in school at the time of the survey, while 28.50% of the parents replying had either three or four children in school. Thus, of the replies received, only 5.13% of the families surveyed had five or more children in school. These figures may be considered to reveal something of family circumstances.

TABLE 11. Frequency Distribution of Families Showing the Number of Children Per Family in Elementary or High School. (n = 1828 Families)

Number Children Per Family	Number of Families	Percent of Total Families
1	519	28.39
2	541	29.60
3	338	18.49
4	183	10.01
5	54	2.95
6	22	1.20
7	9	0.49
8	2	0.11
9	7	0.38

Educational Level of Parent or Guardian Completing the Questionnaire and Educational Aspirations for their Children.

Table 12 indicates the parent's or guardian's educational aspirations for their children. There was a marked increase in the educational aspirations which parents and guardians have for their children as compared to their own educational level.

Approximately 75% of the parents completed either grade school or high school. Their educational aspirations for their children were higher. Only 12.47% of the parents or guardians would be satisfied with a similar educational attainment for their children. It is interesting to note that only 23.75% of the parents or guardians received any post-secondary education, while 83.54% desired post-secondary education for their children.

TABLE 12. Comparison of Educational Level of the Parents or Guardians Completing the Questionnaire and their Educational Aspirations for their Children. (N = 1828 Families)

Educational Level	Attained by Parents (Percent)	Educational Aspirations for their Children (Percent)
Grade school	32.06	.49
High school	42.56	11.98
Trade, business or technical school	7.93	29.54
Some college	7.88	13.46
Four-year college degree	6.13	30.91
Master's or doctorate degree	1.81	9.63
Not indicated	1.64	3.99

Rating of CVTI as Compared to Ratings Given Other Criterion Educational Institutions in the Area.

Table 13 indicates how parents rate CVTI in relation to two other reputable, well-established institutions within the impact area. By adding the "excellent" and "good" percentages: ABC Institution was rated such by 66.58% and XYZ Institution was rated 68.44%, while CVTI compares quite well with 66.03%. The "Average" rating given to CVTI is not greatly different from the other institutions. In fact, all of the columns show CVTI is regarded as comparable. A percentage of 20.79 replied that they did not know enough about CVTI to rate it in comparison to the two other criterion institutions.

TABLE 13. Ratings of Catawba Valley Technical Institute as Compared to Ratings Given Other Criterion Educational Institutions in the Area. (n = 1828 Families)

	Percentage of Responses				
	Excellent	Good	Average	Poor	Don't Know
Criterion Institutions[1]					
ABC Institution	23.69	42.89	9.14	0.33	16.30
XYZ Institution	30.42	38.02	4.76	0.38	18.49
Catawba Valley Technical Institute	20.95	45.08	8.48	0.55	20.79

[1]The criterion institutions were comprised of two reputable, well-established institutions within the impact area and served as a bench mark for comparing CVTI.

Ratings of Educational Programs at CVTI

The information given in Table 14 is indicative of the impression which the parents have concerning the educational programs presently offered at CVTI. In their replies, 45.37% of the parents rated the one-year trade programs at CVTI as either "excellent" or "good" while 10.83% rated them "average" and 32.39% indicated that they did not know enough to reply. In the two-year technical programs, 53.45% of the parents rated these programs as either "excellent" or "good" while 28.28% indicated that they did not know enough to rate them. In the general adult and upgrading adult programs, essentially the same divisions occurred when the parents rated these areas.

TABLE 14. Ratings of Educational Programs at Catawba Valley Technical Institute. (n = 1828 Families)

	Percent of Families					
Educational Programs	Excellent	Good	Average	Poor	Don't Know	No Response
One-Year Trade Programs	11.43	33.94	10.83	0.60	32.39	10.78
Two-Year Technical Programs	18.93	34.52	5.20	0.22	28.28	12.86
General Adult Programs	16.08	32.88	7.66	0.38	29.32	13.68
Upgrading Adult Programs	16.25	30.20	7.28	0.38	31.18	14.72

Percentages of Parents or Guardians Who Have Visited CVTI or Have Taken Courses at CVTI.

In Table 15,it is noted that a very large percent of the parents surveyed replied that they had not visited CVTI. Seventy-one and seventy-seven one-hundredths percent answered "no" when asked if they had visited the Institute. An even greater percentage, 87.25, reported that they had not taken a course of any type which was offered under the auspices of CVTI.

TABLE 15. Percentages of Parents or Guardians Who Have Visited CVTI or Have Taken Courses at CVTI. (n = 1828 Families)

Parents or Guardians	Percent Response	
	Yes	No
Visited CVTI	27.13	71.77
Taken Course at CVTI.	11.38	87.25

Parents' Recommendations Toward Expanding Programs Offered at CVTI.

Table 16 indicates the opinions of parents concerning the expansion of existing areas of study at CVTI and their feelings toward adding a two-year college parallel program to the existing curricula at the Institute. It was felt by a majority of the parents replying that all of the existing programs should be expanded and 75.38% of the parents replying stated that they desired the addition of the two-year college parallel program.

TABLE 16. Parent Recommendations Toward Expanding Programs Offered at Catawba Valley Technical Institute. (n = 1828 Families)

Recommendations	Percent Response		
	Yes	No	No Response
Expand one-year trade programs	58.53	10.45	31.02
Expand two-year technical programs	55.14	10.34	34.52
Expand general adult programs	56.78	8.86	34.35
Expand upgrading programs	53.88	8.37	37.75
Start a two-year college parallel program	75.38	7.49	17.12

Implications of Parents' Data

This questionnaire revealed a number of facts which will be valuable in the planning of future programs at CVTI.

The importance of educational training for young people now and in the future is recognized by the parents surveyed in that the greatest majority of the parents desired a higher educational level for their children than they had attained.

One of the questions of the survey form was designed to determine the impression of the parents concerning CVTI in comparison with two other higher educational institutions in this area. The parents indicated their belief that CVTI compared favorably with the other institutions.

A major point of importance which was determined from the parents' survey was the fact that significant numbers of the parents replying indicated a lack of knowledge concerning the educational programs offered at CVTI. In the replies of the parents, the majority rated CVTI's educational programs as either "excellent" or "good."

The survey of parents pointed out that 71.77% had never visited CVTI and that 87.25% had never taken a course of any sort at CVTI. This information is important in planning the public relations aspect of the Institute.

In the total rank of the program offerings at CVTI, a majority of the parents recommended expansion. The greatest majority, 75.38% recommended the establishment of a two-year college parallel program to round out the total program offerings at the Institute.

It was indicated in all of the replies to questions in the survey instrument that the parents favored the general expansion of the Institute and that they held a high opinion of what was being done.

Perception of Community Citizens Toward CVTI

The public opinion survey was designed to determine the perception of community citizens of CVTI's image and needs. Forms were mailed to a random sample of people in the community. Results of the public opinion survey represent the general community's viewpoint of CVTI's needs, image and community knowledge about the Institution. Results of these findings are based on 488 responses out of 1,653 questionnaires mailed. The recipients of the questionnaires were randomly selected out a total population in the impact area of 316,100 persons.

The citizen survey indicated that the perception of the community concerning CVTI's image and needs for development was, in general, an affirmative one. However, there were certain areas in which it was felt by the respondents that improvements, extensions or changes were needed.

It was felt by 95.08% of those responding that CVTI has a good image or reputation, while 3.69% indicated that they did not know. The questions concerning a need for more graduates in both the one-year trade programs and the two-year technical programs for the next five years indicated that there was a need for an increase in both areas. It must be pointed out that 28.07% of the respondents indicated that they did not know if there was a need for more graduates in the one-year trade programs and 26.23% indicated the same concerning the two-year technical programs. It is interesting to note that only 3.89% of the respondents indicated that the present CVTI facilities are adequate for the next five years, while 34.84% said that the facilities are not adequate for the next five years. Another figure of significance to the future planning of CVTI is the fact that 57.79% of the persons replying said that they did not know if the facilities are adequate.

A majority of those replying, 67.75%, indicated that CVTI should add a two-year college program to its present services, while 11.07% said that a two-year college program was not needed and 23.16% replied that they did not know.

In general, it seems that the community is satisfied with CVTI graduates as is shown by the 74.39% of the replies indicating "yes" while only 1.43% replied "no" and again a large number, 22.13%, indicated that they did not know.

The feeling of 89.55% of the persons replying was that more adults needed to upgrade their job or supervisory skills, a fact of significance for the future planning of the Adult Extension Program at CVTI.

When asked if they would recommend CVTI to their children or to their neighbors' children, 89.34% of the individuals replying indicated "yes."

As was shown in other instruments of the survey, when asked if they had visited CVTI, 51.02% replied that they had not, while 46.72% indicated that they had visited the Institution. It is of particular interest to note that 1.02% of those replying said they did not know whether they had visited CVTI or not.

TABLE 17. A Survey of Public Opinion Toward Catawba Valley Technical Institute. (n = 488)

Variables	Yes	No	Don't Know	No Response
Respondents visited CVTI	46.72	51.02	1.02	1.23
Aware of CVTI's Educational Programs	81.76	12.50	4.30	1.43
Respondents or member of respondent's family who have taken course at CVTI	44.47	52.87	0.82	1.84
Feel that CVTI has a good image or reputation	95.08	1.02	3.69	0.20
Familiar with the approximate costs of attending CVTI	48.16	45.90	4.10	1.84
Would recommend CVTI to your children or neighbor's children	89.34	0.82	7.14	2.66
More graduates needed from one-year trade programs 1969-1974	68.85	1.23	28.07	1.84
More graduates needed from two-year technical programs 1969-1974	71.31	0.61	26.23	1.84
More adults need to upgrade their job or supervisory skills	89.55	1.23	7.79	1.43
More adults will want to participate in general interest adult courses	65.16	2.46	29.92	2.46
Present CVTI facilities are adequate	15.78	14.55	65.78	3.89
Present CVTI facilities are adequate for the next 5 years	3.89	34.84	57.79	3.84
CVTI should add a two-year college program	64.75	11.07	23.16	1.02
Community is satisfied with the CVTI graduates	74.39	1.43	22.13	2.05
CVTI should expand its industrial programs	71.31	1.43	21.51	6.35

Employment and Training Needs as Perceived by Industry

The industry survey was designed to determine the needs of industry now and five years in the future. In certain selected industries, forms were delivered and collected by a member of the survey staff. Forms were mailed on a random sample basis to other industries in the impact area.

Results of the industry survey represent the viewpoint of industry concerning employment needs as a result of replacement and from expansion in the future. Other information derived from the industry survey concerned programs which were needed to train personnel for industry and programs which should be added at CVTI. Results of these findings were based on 155 responses out of 525 forms distributed.

Classifications by Types of Business of those Surveyed in the Catawba Valley Impact Area.

Table 18 is designed to show the types of business in the area, the number of industries surveyed and the percent of those replying.

TABLE 18. Businesses and Industries Responding to the Catawba Valley Impact Area Survey. (n = 155)

Types of Businesses in Area	Number Responding	Type of Business Responding By Percent
Furniture	46	29.30
Textiles	19	12.10
Transportation	3	1.91
Agriculture	2	1.27
Automotive	4	2.55
Electrical & Electronics	3	1.91
General Merchandising	6	3.82
Public Agencies	0	0.0
Building Trades	8	5.10
Hosiery	21	13.38
Other	43	28.66
TOTAL	155	100.00

Businesses and Industries Surveyed in the Catawba Valley Impact Area Classified by County.

Table 19 is designed to list the counties in the area surveyed, the number of industries which were surveyed by county and the percent of those surveyed on a county basis.

TABLE 19. Businesses and Industries Surveyed in Catawba Valley Impact Area Classified by County. (n = 155)

Counties in Area	No. of Industries Surveyed	Percent
Catawba	105	67.7
Caldwell	8	5.2
Burke	7	4.5
Alexander	6	3.9
Iredell	10	6.5
Lincoln	2	1.3
Not Indicated	17	11.0

Survey of Employment and Training Needs for the Catawba Valley Impact Area

Tables 20 and 21 indicate the job level, number of employees now working in the job level, current number of unfilled positions, yearly replacement needs, number of additional employees needed for expansion two years from now, and the number of additional employees needed for expansion five years from now. Table 20 shows the percentage of replacement needs for managerial, supervisory, technical, clerical, skilled, and unskilled employees. Table 21 shows the percent of increase in employment needs in the Catawba Valley area by 1971 and by 1974 on a numerical and percentage basis.

TABLE 20. Percentage Replacement Needs for Managerial, Supervisory, Technical, Clerical, Skilled and Unskilled Employees. (n = 155 Industries Replying)

	Unfilled Positions (1968)		Estimated Replacement Needs (1968)	
Job Level	Number	Percent	Number	Percent of Current Work Force
Managerial	9	.7	80	6.0
Supervisory	80	3.4	189	8.0
Technical	103	9.2	146	13.0
Clerical	161	4.7	714	21.0
Skilled	1,603	7.6	2,746	13.0
Unskilled	691	5.7	4,617	38.0

TABLE 21. Percent Increase in Employment Needs in the Catawba Valley Impact Area by 1971 and 1974. (n = 155 Industries Replying)

		Projected Work Force			
		1970		1973	
Job Level	Work Force 1968	Work Force Needed	Percent Increase	Work Force Needed	Percent Increase
Managerial	1,328	1,663	25.0	1,819	37.0
Supervisory	2,365	2,885	22.0	3,075	30.0
Technical	1,120	1,389	24.0	1,658	48.0
Clerical	3,402	4,082	20.0	4,321	27.0
Skilled	21,120	25,766	22.0	27,878	32.0
Unskilled	12,150	16,767	26.0	16,281	34.0

Manpower Shortages by Job Level

Table 22 indicates the opinions of 155 companies surveyed as to whether there is or is not a shortage of manpower by job level. The industries indicated that there were shortages of manpower in each of the job levels. The major area of shortage was in the skilled job classification where 60.64% of those replying said there was a shortage. It was significant to note that while 32.25% indicated that there was a shortage in the technical area, 57.41% indicated that they were undecided.

TABLE 22. Manpower Shortages by Job Level. (n = 155)

Job Level	Percent Indicating Yes	Percent Indicating No	Percent Indicating Undecided
Managerial	41.29	30.96	27.74
Supervisory	47.09	18.06	34.83
Technical	32.25	10.32	57.41
Clerical	34.19	28.38	37.41
Skilled	60.64	9.67	29.67
Unskilled	32.90	20.64	46.45

Upgrading Courses Needed for Personnel by Job Level

Table 23 indicates the need for upgrading courses for personnel by job level. The companies indicated that 54.83% of the supervisory personnel need upgrading courses, while 48.38% of the skilled workers need upgrading courses. Upgrading was needed by 38.70% of the managerial level, 36.77% of the technical area and 38.06% of the clerical level. It is further noted that 53.54% of the industries replying were undecided concerning a need for upgrading in technical job levels.

TABLE 23. Upgrading Courses Needed for Personnel by Job Level. (n = 155)

Job Level	Percent Indicating Yes	Percent Indicating No	Percent Indicating Undecided
Managerial	38.70	20.00	41.29
Supervisory	54.83	7.74	37.41
Technical	36.77	9.67	53.54
Clerical	38.06	16.77	45.16
Skilled	48.38	12.25	39.35
Unskilled	23.22	16.12	60.64

One-Year Trade Programs Now Being Offered at CVTI Which the Industries Surveyed Feel Will Be Needed to Train Personnel for their Firms.

Table 24 shows the one-year trade programs now being offered at CVTI which the industries feel will be needed to train personnel for their firms. Table 25 lists the additional one-year trade programs which the industries feel should be added at CVTI. The suggested programs represent a complete listing of all of the one-year programs which might need to be added.

TABLE 24. One-Year Trade Programs Now Being Offered at CVTI Which the Industries Surveyed Feel Will Be Needed to Train Personnel for their Firms. (n = 155)

Programs Now Offered	No. of Firms Needing Program
Automotive Mechanics	8
Electrical Installation & Maintenance	17
Machine Shop	21
Practical Nursing	4
Upholstering	21
Upholstery Cutting and Sewing	21
TOTAL	92

TABLE 25. Additional One-Year Trade Programs Which the Industries Feel Should Be Added at CVTI. (n = 155)

Auto Body Mechanics	Announcer Training
Frame and Front-End Alignment	Theory of Mechanics
Sewing Machine Mechanics	Offset Printing
Sewing Machine Operators	Textile Courses
Hosiery Knitters	Furniture Frame Manufacturing
Carpentry	Diesel Mechanics
Frame Building	Building Trades
Salesmanship	

Two-Year Technical Programs Now Being Offered at CVTI Which the Industries Surveyed Feel Will Be Needed to Train Personnel for their Firms.

Tabel 26 represents the two-year technical programs which are now being offered at CVTI and which the industries feel will be needed to train additional personnel for their firms. In addition to the programs currently being offered, business and industry suggested adding (1) industrial management (2) merchandising (3) concrete technology (4) laboratory technology and (5) dental hygiene.

TABLE 26. Two-Year Technical Programs Now Being Offered at CVTI Which Industries Feel Will Be Needed to Train Personnel for their Firms. (N = 155)

Program	No. of Firms Needing Program
Accounting	31
Agricultural Business	2
Architectural Drafting & Design	6
Business Administration	26
Furniture Drafting & Design	10
Furniture Production Management	22
Mecharical Drafting & Design	9
Electromechanical	8
Electronics	7
Data Processing	23
Ornamental Horticulture	2
Secretarial (Executive)	25
Secretarial (General)	60
Secretarial (Medical)	4
Secretarial (Legal)	0
Traffic & Transportation	21
TOTAL	256

The Addition of a Two-Year College Program to the Existing Programs at Catawba Valley Technical Institute.

Table 27 shows the percentage of "yes," "no" and "undecided," when asked the question "Should CVTI add a two-year college parallel program to its existing programs?" Seventy-five percent of the industries replying indicated that a two-year college parallel program should be added to the existing programs at CVTI. Only 1.2% replied "no" to the question. Some of the industries replying (23.8%) were undecided.

TABLE 27. Should Catawba Valley Technical Institute Add a Two-Year College Program to its Existing Programs? (n = 155)

YES	NO	UNDECIDED
75.0%	1.2%	23.8%

Implications of Industry Data

In the information derived from the survey of businesses and industries in the Catawba Valley impact area, several general conclusions may be drawn. Among these is a need within the next two years for an average increase of 22.9% of personnel in all categories of employment which should reflect an increasing growth in the programs offered and the number of students graduating from CVTI. It should be further noted that CVTI must increase its efforts by 34.4% to meet the needs and requirements from industry within a five-year period. The business survey reflected the importance of the furniture, textile and hosiery industries in the impact area but it also pointed out that there is an increasing diversification of business and industry in the area.

The survey indicated that additional one-year trade programs and two-year technical programs should be added to more adequately meet the needs of industry in the area.

Supplementary Educational Data

The information derived from the survey forms for this study may be related to other available statistical information. The information presented in the next section is presented as secondary data about the Catawba Valley Impact area without an attempt to analyze or summarize the data.

Table 28. Percent of Change in Enrollment, 1967-68[a] in the Schools of the Catawba Valley Impact Area

Administrative Unit	1957-58 Enrollment	1966-67 Enrollment	Increase or (Decrease)	Per Cent	Statewide Rank (of 160)
Catawba Co.	7,889	10,225	2,336	29.6	20
Hickory	6,216	6,923	707	11.4	59
Newton	2,591	3,116	525	20.3	33
Caldwell Co.	10,038	11,830	1,792	17.9	44
Lenoir	2,393	2,194	(199)	-8.3	136
Burke Co.	7,628	8,773	1,145	15.0	51
Morganton	2,679	2,557	(122)	-4.7	125
Glen Alpine	1,385	1,639	254	18.3	41
Iredell Co.	8,175	9,460	1,285	15.7	47
Statesville	3,887	4,965	1,078	27.7	22
Mooresville	2,405	2,546	141	5.9	80
Lincoln Co.	4,896	5,178	282	5.8	81
Lincolnton	2,166	2,573	407	18.8	37
Alexander Co.	3,881	4,462	581	15.0	50
State Total	1,060,187	1,218,120	157,933	14.9	--

Statewide Range: Low - 30.1%

High - 103.2%

Median - 5.9%

[a]Statistical Services, "Profile of Significant Factors in Education in North Carolina," Department of Public Instruction, Raleigh, July 1968.

Table 29. Percent Change in Enrollment by County, 1957-58 to 1967-68

County	1957-58 Enrollment	1967-68 Enrollment	Increase or (Decrease)	Percent	Statewide Rank (of 100)
Catawba	16,696	20,264	3,568	21.4	13
Iredell	14,467	16,971	2,504	17.3	17
Alexander	3,881	4,462	581	15.0	20
Caldwell	12,431	14,024	1,593	12.8	28
Burke	11,692	12,969	1,277	10.9	32
Lincoln	7,062	7,751	689	9.8	35
State Total	1,060,187	1,218,120	157,933	14.9	--

Statewide Range: Low - (27.6)%

High - 83.3%

Median - 3.15%

Table 30. Percent of 1959-60 Fifth Grade Graduating in 1967

County	Fifth Grade 1959-60	1967 Graduates	Percent	Rank (of 100)
Catawba	1,638	1,176	71.8	3
Iredell	1,369	891	65.1	29
Burke	1,176	726	61.7	40
Lincoln	665	404	60.8	46
Alexander	388	225	58.0	60
Caldwell	1,256	641	51.0	90
State Totals	104,634	65,009	62.1	--

Statewide Range: Low - 45.3%

High - 73.8%

Median - 59.65%

Table 31. Percent High School Graduates Entering College

Administrative Unit	Number Graduates	Entering College	Percent	Rank (of 166)
Catawba Co.	543	148	27.3	130
Hickory	443	237	53.5	18
Newton	190	75	39.5	61
Caldwell Co.	481	112	23.3	148
Lenoir	160	93	58.2	10
Burke Co.	494	192	38.8	65
Morganton	139	92	66.2	3
Glen Alpine	93	30	32.2	92
Iredell Co.	465	123	26.5	134
Statesville	277	155	55.9	13
Mooresville	149	61	40.9	51
Lincoln County	213	64	30.0	104
Lincolnton	191	91	47.7	31
Alexander Co.	225	63	28.0	123
State Totals	65,009	24,255	37.3	---

Statewide Range: Low - 11.7%

High - 69.5%

Median - 33.8%

Table 32. Percent High School Graduates Entering Trade, Business, Other Trainin

Administrative Unit	Number Graduates	Entering Training	Percent	Rank (of 166)
Catawba Co.	543	112	20.6	21
Hickory	443	70	15.8	59
Newton	190	29	15.2	71
Caldwell Co.	481	52	10.8	118
Lenoir	160	21	13.1	92
Burke Co.	494	26	5.3	156
Morganton	139	3	2.2	164
Glen Alpine	93	8	8.6	138
Iredell Co.	465	78	16.8	44
Statesville	277	44	15.9	55
Mooresville	149	19	12.8	99
Lincoln Co.	213	31	14.5	78
Lincolnton	191	33	17.3	38
Alexander Co.	225	30	13.3	88
State Totals	65,009	9,359	14.4	--

Statewide Range: Low - 0.0%
High - 35.2%
Median - 13.8%

Table 33. Per Pupil Expenditure, Federal Funds, By County

County	Amount Per Pupil	Rank (of 100)
Lincoln	$53.58	77
Burke	47.27	85
Catawba	32.14	94
Iredell	27.59	98
Alexander	26.00	99
Caldwell	24.18	100
State Total	$65.66	--

Statewide Range: Low - $24.18

High - $165.79

Median - $82.79

Table 34. Per Pupil Expenditure, State Funds, By County

County	Amount Per Pupil	Rank (of 100)
Lincoln	$297.33	51
Alexander	292.56	66
Caldwell	286.68	85
Iredell	286.15	87
Burke	284.68	91
Catawba	282.06	96
State Totals	$292.18	

Statewide Range: Low - $264.33

High - $340.32

Median - $297.35

Table 35. Per Pupil Expenditure, Local Funds, By County

County	Amount Per Pupil	Rank (of 100)
Burke	$60.84	22
Caldwell	51.60	45
Iredell	50.84	47
Catawba	50.55	48
Lincoln	45.53	58
Alexander	22.05	98
State Total	$68.45	--

Statewide Range: Low - $19.63

High - $166.47

Median - $48.41

Table 36. Per Pupil Expenditure, All Sources, By County

County	Amount Per Pupil	Rank (of 100)
Lincoln	$396.44	81
Burke	392.79	85
Catawba	364.75	96
Iredell	364.58	97
Caldwell	362.46	99
Alexander	340.61	100
State Total	$426.29	--

Statewide Range: Low - $340.61

High - $505.60

Median - $438.05

Table 37. Per Capita Income By County

County	Estimated Population 1966	Total Personal Income	Per Capita Personal Income	County Rank (by 100)
Catawba	82,514	$ 238,394,000	$2,889	4
Iredell	69,849	169,059,000	2,420	15
Alexander	16,555	38,959,000	2,353	18
Caldwell	54,971	124,698,000	2,268	26
Lincoln	31,170	70,407,000	2,259	27
Burke	57,692	129,320,000	2,242	30
State Totals	4,974,000	$11,321,000,000	$2,277	--

Statewide Range: Low - $1,143

High - $3,299

Median - $1,825

Table 38. Equalized Valuation Per Pupil Enrolled, 1966-67

County	Equalized Valuation	Enrollment	Valuation Per Pupil	Rank (of 100)
Catawba	$ 625,612,747	20,030	31,234	3
Lincoln	181,148,202	7,720	23,465	22
Burke	288,319,435	12,702	22,699	24
Iredell	328,659,112	16,621	19,774	36
Caldwell	273,475,361	13,859	19,733	37
Alexander	71,050,682	4,082	17,406	48
State Totals	$24,725,614,512	1,208,112	20,466	--

Statewide Range: Low - $8,194

High - $35,030

Median - $16,919

Table 39. Local Property Taxes for Schools as Percentage of Property Taxes for All Purposes

County	Amount Schools	Amount All Purposes	Percent	Rank (of 100)
Lincoln	728,888	$ 1,359,683	53.6	12
Iredell	1,740,419	3,388,289	51.4	16
Burke	1,331,700	2,914,996	45.7	35
Catawba	2,106,962	5,426,937	38.8	72
Caldwell	988,700	2,613,786	37.8	75
Alexander	145,014	439,167	33.0	90
State Totals	$117,035,784	$280,129,551	41.8	--

Statewide Range: Low - 19.1%

High - 60.1%

Median - 42.8%

Table 40. Projected Number of N. C. Public High School Graduates in N. C. Counties 1962 - 1970

	Years								
County	62	63	64	65	66	67	68	69	70
Alexander	150	155	187	254	235	225	229	243	215
Burke	526	524	620	753	754	687	668	671	659
Caldwell	524	554	599	783	820	730	721	770	730
Catawba	807	838	843	1072	1006	962	980	1030	1009
Iredell	735	675	681	918	867	781	822	851	879
Lincoln	306	317	342	442	429	380	403	401	438

Source: Community Colleges for N. C. - A Study of Need, Location, and Service Areas

Table 41. Projected College Age Population 1960, 1965, 1970

County	Age 18 - 21			Age 18 - 24		
	1960	1965	1970	1960	1965	1970
Catawba	4409	5390	5937	7289	8925	9986
Burke	2889	3704	3705	4962	6135	6335
Caldwell	3116	3652	3718	5164	6087	6238
Alexander	980	1106	1061	1581	1839	1777
Iredell	3331	4121	4367	5673	6768	7639
Lincoln	1667	1956	1914	2712	3220	3171

CHAPTER III

SUMMARY AND CONCLUSIONS

This study was a cooperative venture between Catawba Valley Technical Institute and the Research Coordinating Unit; it was designed to provide information which will aid the Institution in determining its course for a five-year period. Within the span of one year the survey forms were constructed, administered, tabulated, analyzed and reported in this publication. This study is the first of its type in the Community College System. Hopefully, it will lead the way for other studies where there is a desire to base decisions on accurate, up-to-date information.

The overall design and conduct of the study were under the direction of Catawba Valley Technical Institute, with the assistance of the Research Coordinating Unit. Primary responsibility for the data collection and activities in the impact area was the responsibility of Catawba Valley Technical Institute. The Research Coordinating Unit assisted in the organization of the final report. The writings of the final report, was done by the Catawba Valley Technical Institute staff.

Conclusions

Based on the previous reported findings, the following conclusions have been drawn:

1. There is a trend toward a higher level of education in the impact area, both at a four-year college level and in the trade and technical areas.

2. There is a specific desire to achieve a higher level of education in both the college level and technical and trade levels.

3. There is a specific desire among the majority of parents for their children to achieve a higher level of education than they themselves achieved.

4. There is a definite need to intensify the public relations program of Catawba Valley Technical Institute so that more persons may become aware of the Institution and its objectives.

5. There is a need for Catawba Valley Technical Institute to increase its efforts in order to accommodate the expected growth in the next five years. Consideration must be given not only to the present programs but to additional programs to aid expansion of present industry and new industry which may locate in the impact area.

6. There is a need and desire for the addition of a two-year college parallel program to the present programs to make the Institution a comprehensive community college.

7. There is a need for a continuing evaluation program of existing curricula at the Institution and of the need for additional programs.

8. There is a need for a continuing evaluation program to determine the needs in facilities, equipment, staff and other resources for the expected growth of Catawba Valley Technical Institute in the five-year period covered by this study.

9. There is a need for further study in the area of occupational upgrading to better serve the needs of industry.

Recommendations

1. It is recommended that the necessary preparations be instituted to provide for the establishment of a two-year college parallel program to make Catawba Valley Technical Institute a comprehensive community college.

2. It is recommended that intensive investigation be made in local industry to determine how the Institution may better serve their needs in the area of occupational upgrading courses. This investigation may be instituted on the basis of replies made in the industry survey vehicle. It was revealed in this

survey that immediate attention should be placed on the area of supervisory, skilled, managerial, and technical upgrading courses.

3. It is recommended that the President of the Institution appoint a committee drawn from faculty, administration, and industry to maintain a continuing evaluation program of existing curricula and to determine the need for additional programs.

4. It is recommended that a five-year master plan be made concerning facilities, equipment, staff, and resources for the Institution. The five-year projection, which should be included in this master plan, should be made on the basis of information gained from the survey and should include projections for the five-year period covered by the study. Continuing study should be made in order to keep the master plan up to date.

5. It is recommended that a public relations office be established. A significant percentage of the replies in all of the survey vehicles indicated a lack of knowledge of the programs offered at CVTI. Therefore, it should be the major duty of this office to deal with public relations.

6. It is recommended that periodic surveys of this type be made to aid in updating the plan for the future of the Institution and to meet the challenge of the ever-changing technologies in the impact area.

APPENDIX

CVTi Catawba Valley Technical Institute

A SURVEY OF EMPLOYMENT AND TRAINING NEEDS FOR THE CATAWBA VALLEY AREA

STUDENT FORM

1. Your Name ..... Name of School .....

   County ..... Grade 8 9 10 11 12
   (Circle correct one)

   Age ..... Male ..... Female .....
   (Check which)

2. My educational plans are to (Check the one answer that best fits your present plans):
   - ..... a. Drop out before completing high school
   - ..... b. Graduate from high school only
   - ..... c. Graduate from a trade or technical school
   - ..... d. Graduate from a business or nursing school
   - ..... e. Graduate from a 4-year college or university
   - ..... f. Go into military service and learn a trade
   - ..... g. Other (Please explain) .....

3. If Catawba Valley Technical Institute offered a 2-year college program would you be interested in taking your first 2 years of college there?
   - ..... a. Not planning to go to college
   - ..... b. Not sure
   - ..... c. Yes
   - ..... d. No

4. My job plans are to (Check the one answer that best fits your present plans):
   - ..... a. Go to work full-time with no further schooling
   - ..... b. Go to work part-time and go to school part-time
   - ..... c. Complete high school, trade school, or college before going to work full-time

5. My parents or guardians (after I leave high school):
   - ..... a. Want me to go to college
   - ..... b. Want me to go to a technical institute or other business or trade school
   - ..... c. Want me to go to work without going on to school
   - ..... d. Do not care what I do

6. In general, have the grades you received in school been
   - ..... a. close to an "A" average?
   - ..... b. close to a "B" average?
   - ..... c. close to a "C" average?
   - ..... d. below a "C" average?

7. What is your major course emphasis in school?
   - ..... a. College preparatory
   - ..... b. Technical-Vocational
   - ..... c. General Education

8. How long a program of training would you be willing to take if you thought you could then get a good job?
   - ..... a. Less than 6 months
   - ..... b. Up to 12 months
   - ..... c. Up to 2 years
   - ..... d. More than 2 years

9. In terms of your future job, how important to you are each of the statements below? Use one of the following responses to answer each question.

1) very important
2) of some importance
3) not important
4) do not know
5) have not thought about it

.....a. Steady employment (no winter or summer lay-offs)
.....b. Liking the work you do (work you enjoy doing)
.....c. A good salary
.....d. Regular work hours (example: 8:00 - 5:00 daily, 5 days per week)
.....e. Opportunity for job advancement (chance for promotion)
.....f. Having responsibility
.....g. Working with things (materials & equipment) rather than people
.....h. Good working conditions

10. From what I personally know about it or have heard from friends, Catawba Valley Technical Institute is:

.....a. An excellent school
.....b. A good school
.....c. A poor school
.....d. Don't know
.....e. Never heard of Catawba Valley Technical Institute

11. Would you like to pursue one of the following courses at CVTI?

.....Yes .....No. If your answer is yes, check one of the following:

..... 1. 2 Year College Parallel (if offered)
..... 2. Agricultural Business
..... 3. Ornamental Horticulture
..... 4. Accounting
..... 5. Business Administration
..... 6. Data Processing
..... 7. Executive Secretarial
..... 8. General Office
..... 9. Legal Secretarial
.....10. Medical Secretarial
.....11. Traffic & Transportation
.....12. Architectural Drafting and Design
.....13. Electromechanical
.....14. Electronics
.....15. Furniture Drafting and Design
.....16. Furniture Production
.....17. Mechanical Drafting and Design
.....18. Mechanical Technology
.....19. Dental Hygienist
.....20. Building Technology
.....21. Electrical Technology
.....22. Industrial Management
.....23. Teacher's Aide
.....24. Commercial Art
.....25. Business Management
.....26. Sales Management
.....27. Aviation

Other: .....

.....

Trade (1-year programs)

.....1. Automotive Mechanics
.....2. Automotive Body
.....3. Electrical Installation
.....4. Machine Shop
.....5. Practical Nursing
.....6. Dental Assistant
.....7. Upholstering
.....8. Upholstery Cutting and Sewing

Other: .....

.....

CVTi Catawba Valley Technical Institute

A SURVEY OF EMPLOYMENT AND TRAINING NEEDS FOR THE CATAWBA VALLEY AREA

PARENTS' FORM

DIRECTIONS: Please answer the questions below in terms of **the child** who brought this home. Your views may differ for children in general so remember to be specific for **this child.**

1. Total number of children still in elementary or high school .....

2. Person filling out form: .....Father .....Mother .....Guardian .....Other

3. Check the highest educational level:

That you attained	**That you want your child to attain**
.....Grade school	.....Grade school
.....High school graduate	.....High school graduate
.....Trade, business or technical school	.....Trade, business or technical school
.....Completed some college	.....Complete some college
.....Graduated from 4-year college	.....Graduate from 4-year college
.....Received a masters or doctorate	.....Masters or doctorate

4. Rate the following educational institutions or programs:

	Excellent	**Good**	**Average**	**Poor**	**Don't Know**
a. Catawba Valley Technical Institute:	.....	.....	.....	.....	.....
b. Lenoir-Rhyne:	.....	.....	.....	.....	.....
c. Appalachian State University:	.....	.....	.....	.....	.....

Comments: .....

.....

5. Rate the following educational programs at CVTI?

	Excellent	**Good**	**Average**	**Poor**	**Don't Know**
a. One-year trade programs	.....	.....	.....	.....	.....
b. Two-year technical programs	.....	.....	.....	.....	.....
c. General adult programs	.....	.....	.....	.....	.....
d. Upgrading adult programs	.....	.....	.....	.....	.....

Comments: .....

.....

6. Have you ever visited CVTI? .....Yes .....No

7. Have you ever taken a course at CVTI? .....Yes .....No

8. Would you like to see Catawba Valley Technical Institute:

(Yes)	**(No)**	
.....	.....	a. Expand its one-year trade programs
.....	.....	b. Expand its two-year technical programs
.....	.....	c. Expand its general adult programs
.....	.....	d. Expand its upgrading programs
.....	.....	e. Start a two-year college program (community college program) in addition with all existing programs.

Catawba Valley Technical Institute

A SURVEY OF EMPLOYMENT AND TRAINING NEEDS FOR THE CATAWBA VALLEY AREA

COMPANY NAME: ..... PERSON'S NAME: .....

General Instructions: Please complete this survey as accurately as possible but supply estimates if necessary. The list of definitions at the bottom of the form may be helpful in answering some of the questions. Thank you for your help.

Check your type of business or service:

..... 1. Furniture
..... 2. Textiles
..... 3. Transportation
..... 4. Agriculture
..... 5. Automotive
..... 6. Electrical & Electronics
..... 7. General Merchandising
..... 8. Public Agencies
..... 9. Building Trades
..... 10. Hosiery
..... 11. Other: .....

Check the county in which your business or service is located?

..... Catawba
..... Caldwell
..... Burke
..... Alexander
..... Iredell
..... Lincoln

Please complete columns 1-7 for the six job levels listed below:	(1) Number of Employees Now Working in this Job Level	(2) Current Number of Unfilled Positions	(3) Yearly Replacement Needs (Number)	(4) Number of Additional Employees Needed for Expansion 2 years from Now	(5) Number of Additional Employees Needed for Expansion 5 years from Now	Are There Trained Man-Power Shortages in this Job Level? Check Yes	No	Are Upgrading Courses Needed for the Personnel in these Job Levels? Check Yes	No
Managerial									
Supervisory									
Technical									
Clerical									
Skilled									
Unskilled									
TOTALS									

DEFINITIONS:

Managerial—Major responsibility for making operating decisions for a business or service.

Supervisory—Major responsibility for implementing operating decisions or policy.

Technical—Major responsibilities are as an assistant who can work with minimum level supervision. Usually has two years of education beyond high school.

Clerical—Major responsibilities for office work, bookkeeping, retail sales, etc.

Skilled—Major responsibility for producing a product or setting up a production process. Skill developed more as a result of experience than of post-high school training.

Unskilled—Worker with limited skill demands in the work situation.

DIRECTIONS: Please note the types of one-year trade and 2-year technical courses that are offered by the Catawba Valley Technical Institute and react to the questions listed below.

1. Circle any of the **1-YEAR TRADE PROGRAMS** listed below which are or will be needed to train personnel for your firm.

1-Year Trade Programs

1. Auto Mechanics
2. Electrical Installation & Maintenance
3. Machine Shop
4. Practical Nursing
5. Upholstering
6. Upholstery Cutting and Sewing

2. List the names of any additional **1-YEAR TRADE PROGRAMS** which should be added at Catawba Valley Technical Institute. .....

.....

.....

3. Circle any of the **2-YEAR TECHNICAL PROGRAMS** listed below which are or will be needed to train personnel for your firm.

2-Year Technical Programs

7. Accounting
8. Agricultural Business
9. Architectural Drafting and Design
10. Business Administration
11. Furniture Drafting and Design
12. Furniture Production Management
13. Mechanical Drafting and Design
14. Electromechanical
15. Electronics
16. Data Processing
17. Ornamental Horticulture
18. Secretarial (Executive)
19. Secretarial (General Office)
20. Secretarial (Medical)
21. Secretarial (Legal)
22. Traffic and Transportation

4. List the names of any additional **2-YEAR TECHNICAL PROGRAMS** which should be added at Catawba Valley Technical Institute. .....

.....

.....

5. List the names of short-term courses that should be offered at CVTI. .....

.....

.....

6. Should the Catawba Valley Technical Institute add a 2-year college program to its existing programs? .....Yes .....No

Comments: .....

.....

.....

.....

7 Any other comments you would like to make about CVTI: .....

.....

.....